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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,055	08/03/2000	Michael R. Bailey	60,368-091	1047
27305	7590	02/22/2005	EXAMINER	
OEN, WILLIAM L				
ART UNIT		PAPER NUMBER		
		2855		

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/632,055	BAILEY, MICHAEL R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William L. Oen	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 August 2000.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 03 August 2000 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

Claim 9 is objected to because as a newly submitted claim, all of the claim text must be underlined. In the marked-up copy of the claims, only part of the claim text of claim 9 is underlined. Note also, in reissue applications, amendments always reference claims in the *original* patent, not previous amendments.

### *Oath/Declaration*

The reissue oath/declaration filed with this application is defective because it fails to contain a statement that *all* errors, which are being corrected in the reissue application up to the time of filing of the oath/declaration, arose without any deceptive intention on the part of the Applicant. See 37 CFR 1.175 and MPEP Section 1414.

Claims 1-15 are rejected as being based upon a defective reissue oath/declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

It is noted that Applicant has indicated that a supplemental oath or declaration was submitted addressing this issue, however, to date, the Office has not received any such supplemental oath or declaration.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al (U.S. Patent No. 3,498,290) in view of Sainz et al (U.S. Patent No. 4,540,946).

Shaw et al explicitly disclose, for example in figure 1 and in column 2, a flow rate measuring system that includes all of the features of the instant claimed invention. To wit, the flow rate measuring system of Shaw et al. teaches the use of waves (herein, ultrasonic waves) to determine Doppler frequency shift. It is noted, however, that Shaw et al lack an explicit recitation of a method of using a generated *electrical* signal to determine Doppler frequency.

Sainz et al, in the same field of endeavor as Shaw et al, disclose a flow rate measuring system with features very similar to that of Shaw et al, but the system of Sainz et al uses electrical signals – herein microwave signals – to determine Doppler frequency shift (see, e.g., column 5, lines 5-9 et seq of Sainz et al). In view of this explicit teaching of Sainz et al, and because it would have been a routine and expedient

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modification well within the purview of an artisan skilled in flow measuring, it would have been of one having ordinary skill in the art at the time of the invention to have used electrical signal (e.g. microwave signals) rather than ultrasonic waves to determine Doppler frequency shift in the flow rate measuring system of Shaw et al., if desired. This is further obvious because the substitution of electrical wave energy for ultrasonic wave energy in the transmission of signals is routine and widespread in the flow measuring art.

The choice of a particular angle of the signal beam (so long as it is *not* orthogonal to the direction of flow), and the particular spacing between the signal generating means and the fluid whose flow is to be measured using Doppler frequency shift data, if desired, are matters of mere obvious design choice clearly within the purview of one having ordinary skill in the flow measuring art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Oen whose telephone number is 571-272-2186. The examiner can normally be reached on 10:30 am - 9:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William L Oen  
Primary Examiner  
Art Unit 2855

WL Oen  
February 17, 2005